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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/107,486	Yoshiko Shimori et al.
Examiner	**Group Art Unit**
King Y. Poon	2624

☒ Responsive to communication(s) filed on *Oct 16, 2000*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-10, 12-20, 22-36, 38-43, and 45-50* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-10, 12-20, 22-36, 38-43, and 45-50* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 25, 29, 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunt et al.

Regarding claim 25, 29, 33: Hunt discloses an image communication system in which an image server and a client computer are communicating with each other. (See fig. 1A and abstract) The client transmits a request and information related to image data to the server requesting an image, (See column 3 line 2-3) The image server comprises: an image output device for outputting an image (#324 of fig. 3) on the basis of the information relating to the image data transmitted from the client, (see column 3 line 1-12) and a controller (310 of fig. 3) for controlling the sending other information regarding the image. (see # 410 of. Fig. 4A). The client has a modem (see # 324 of fig. 3) to retrieval image data sent from the server.

Note: Hunt teaches to use a computer readable recording medium to store a program. (See 314 of fig. 3)

3. Claims 26, 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurahashi et al.

Regarding claims 26, 30: Kurahashi teaches a client computer (22 of fig. 2) used in an image communication system in which an image server (23 of fig. 2) having a printer (134 of fig. 14) and the client computer are communicating with each other, comprising: a receiving device (311 of fig. 3) for receiving a part of a printing template image data (fig. 1) which is transmitted from the image server (column 8 line 1-8) and represents a part of a window synthesizing user image (fig. 1), and which is used for printing processing in the printer (column 12 line 1-5); and a synthesis device (314 of fig. 3) for synthesizing the received part of the printing template image data and a part of user image data stored in the client computer. (See column 8, 9)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 5, 9, 13, 16-18, 23, 24, 28, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al.

Regarding claim 1: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer having a display (see #330 of fig. 3) are

communicating with each other, and the image server stores image data representing an image. (See column 4 line 66) The client computer comprises: a transmission device, (see # 324 of fig. 3) controlled by a program stored in a ROM (314 of fig. 3), commanding (see column 3 line 1-11) the server to transmit image data stored in the image server, and transmitting information about the image quality that the display is displaying (see column 1 line 64-67, column 2 line 14-24) such that excess data need not be transmitted and processed by the server, (Note: the image quality that the display displaying is information about the display), The image server comprises: a data quantity reduction device (see column 2 line 64-65, column 8 line 29-35) to reduce image data according to the information received from the client, and an image transmission device (to transmit the reduced image data to the client. (See column 2 line 30-55)

Hunt does not specify to use two transmission devices to transmit data from the client to the server. However, it would have been obvious to one of ordinary skill in the art that the program code used for controlling the transmission of the image data and the command are different because they are different procedures and would have required different code to perform the two different functions.

Regarding claim 5: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer having a display (see #330 of fig. 3) communicating with each other, and the image server stores image data. (See column 4 line 66) The server comprises: a receiving device (106 of fig. 1) receiving a command from the client to transmit image data (see column 3 line 2, 106 of fig. 1) and to display, (330 fig. 3) in the client,

information relating the display (thumbnail or low quality) that is transmitted from the client (see column 9 line 1-5); a quantity reduction device (see column 2 line 64-65, #114 of fig. 1B) to reduce image data according to the information received from the client; and an image transmission device (106 of fig. 1) to transmit the reduced image data to the client. (See column 2 line 30-32)

Hunt does not specify to use two transmission devices to transmit data from the client to the server. However, Hunt teaches that the client computer comprises: a transmission device, (see # 324 of fig. 3) controlled by a program stored in a ROM (314 of fig. 3), commanding (see column 3 line 1-11) the server to transmit image data stored in the image server, and transmitting information about the image quality that the display is displaying (see column 1 line 64-67, column 2 line 14-24) such that excess data need not be transmitted and processed by the server. It would have been obvious to one of ordinary skill in the art that the program code used for controlling the transmission of the image data and the command are different because they are different procedures and would have required different code to perform the two different functions.

Regarding claim 9: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer having a display (see #330 of fig. 3) are communicating with each other, and the image server stores image data representing an image. (See column 4 line 66) The client computer comprises: a transmission device, (see # 324 of fig. 3) controlled by a program stored in a ROM (314 of fig. 3), commanding (see column 3 line 1-

11) the server to transmit image data stored in the image server, and transmitting information about the image quality that the display is displaying (see column 1 line 64-67, column 2 line 14-24) such that excess data need not be transmitted and processed by the server, (Note: the image quality that the display displaying is information about the display), and a receiving device (324 of fig.3) receiving the image data reduced on the basis of the display information in the server. (See column 9 line 1-5)

Hunt does not specify to use two transmission devices to transmit data from the client to the server. However, it would have been obvious to one of ordinary skill in the art that the program code used for controlling the transmission of the image data and the command are different because they are different procedures and would have required different code to perform the two different functions.

Regarding claims 13, 17, 18: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer (image data receiver) having a display (see #330 of fig. 3) are communicating with each other. The image server stores image data. (See column 4 line 66) The image server also comprises: an image data display transmission device (see the transmission medium between # 106 and # 304 of fig. 3) for transmitting image display data for displaying a plurality of sample images in side by side fashion (note: all images on a display are located in a side by side (right, up, top, bottom) fashion) for comparing and selection by a user, (see column 13 line 20-30) each of the sample images having different data size (characteristic) (see column 8 line 46-68, column 9 line 1-5) and being transmitted to the

client computer. The client computer comprises a display to display the image data, (see # 330 of fig. 3) and a transmission device (see # 324 of fig. 3) for transmitting image characteristics to the server. (See supplied information and amount of data (data size) of abstract) Even though Hunt does not specify that the display device is an image characteristic setting device, it would have been obvious that the display device can function as an image characteristic setting device because the display device can display the image of different data size sent from the server such that the image with different data size can be selected and displayed by a requester. (see column 9 line 1-5)

Regarding claim 16: Hunt teaches that the image data size can be stored in the server. (See fig. 6A) (at least one)

Regarding 23, 28, 32: Hunt teaches a client computer (104 fig. 1) used in an image communication system (fig. 1) in which an image server and the client computer communicate with each other, comprising: a compression rate setting device (310 of fig. 3) for setting the compression rate of image data; (see fig. 6, abstract, column 12 line 50-67, column 8 line 52, and note) a calculation device (310 of fig. 3) for calculating information relating to the time required for transmission (abstract) in a case where the image data compressed at the set compression rate; (column 12 line 44-60, column 13 line 4-30) and a display for displaying (# 330 of fig. 3) information related to the calculated time for transmission. (See column 9 line 1-5, fig.6)

Note: A transmission time is calculated by dividing the actual data transmitted by the transmission speed.

Note: Hunt teaches to use a computer readable recording medium to store a program. (See 314 of fig. 3)

Note: Column 8 line 45-67 teaches to set image data to be transmitted by using different compression technique. It is obvious that by using different compression technique is equivalent to the use of different compression rates because each compression technique would have a different compression rate.

Regarding claim 24: Hunt teaches that the client computer has a display control device (310 of fig. 3) for controlling the display to display an image represented by the image data compressed at the set compression rate. (See column 9 line 1-5)

6. Claims 2, 6, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al. in view of Takaoka et al.

Regarding claims 2, 6: Hunt has disclosed all of the claim limitations except that the display information is related to the maximum number of colors, and that the quantity reduction device includes color reduction means for reducing a number of colors of an image.

However, Hunt teaches that the reduction of image data is for reducing transmission time. (See abstract) As a result, excess data need not be transmitted when the requester does not need or desire it. (See column 6 line 22-24) Takaoka teaches that the (quality of an image) level of color (number of color) are image data (to be displayed or print). (See column 19 line 1-8) The more image colors there are, the more image data needed to represent the colors. Hunt and

Takaoka are combinable because they are from the same area of transferring images through a network.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Hunt's image communication system by including the maximum number of colors that a display can display in the display information, and adding a color reduction means, in the data quantity reduction device, for reducing a number of colors of an image to be displayed. The suggestion of doing so would have reduced data transmission time which is desirable as discussed in Hunt's reference abstract. Therefore, it would have been obvious to combine Hunt and Takaoka to obtain the invention as obtain the invention as specified in claims 2, 6.

Regarding claim 14: Hunt has disclosed all of the claim limitations except that images include different color tonalities.

Takaoka teaches that the images include different color tonalities. (See column 19 line 1-8) Hunt and Takaoka are combinable because they are from the same area of transferring images through a network.

At the time of invention, it would have been obvious to include color tonalities in the image data of Hunt, as taught by Takaoka. The suggestion of doing so would have allowed the image to be displayed with different colors and is desirable. This can be reasoned by one of ordinary skill in the art because the more colors there are, the better image a person can perceive. Therefore, it would have been obvious to combine Hunt and Takaoka to obtain the invention as obtain the invention as specified in claim 14.

7. Claims 3, 7, 19, 20, 22, 27, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al. In view of Tsutamori et al.

Regarding claims 3, 7: Hunt has disclosed all of the claim limitations except that the display information is related to the resolution of the display, and that the quantity reduction device includes thinning means for reducing an image data on the basis of the information relating to resolution.

However, Hunt teaches that the reduction of image data is for reducing transmission time. (See abstract) As a result, excess data need not be transmitted when the requester does not need or desire it. (See column 6 line 22-24) Takaoka teaches that the resolutions of an image (quality of an image) are image data (to be displayed or print) and image data would be reduced by thinning base on resolution. (See column 19 line 1-8) Hunt and Tsutamori are combinable because they are from the same area of transferring images through a network.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Hunt's image communication system by including resolution information in the display information, and adding a thinning means, in the data quantity reduction device, for reducing image data based on resolution of the display, as taught by Tsutamori. The suggestion of doing so would have reduced data transmission time which is desirable as discussed in Hunt's reference abstract. Therefore, it would have been obvious to combine Hunt and Tsutamori to obtain the invention as obtain the invention as specified in claims 3, 7.

Regarding claims 19, 27, 31: Hunt discloses an image communication system (see fig. 1A) in which an image server and a client computer having a display (see #330 of fig. 3) are communicating with each other; the image server stores image data. (See column 4 line 66) The image server further comprises: a quantity reduction device (see column 2 line 64-65) to reduce image data according to the information received from the client, and an image transmission device (output device) to transmit the reduced image data. (See column 2 line 30-32)

Hunt does not teach: the image data quantity reduction device is located in the client, the reduced image is transmitted from the client to the server, a print image area designation means for designating an image area to be printed of an image represented by image data of one frame, and partial image data extraction means for extracting partial image area data representing the designated image area from the image data of one frame.

Tsutamori teaches: an image data quantity reduction device located in the client, (101 of fig. 1A) the reduced image is transmitted from the client to a server, (200 of fig. 1A) a print image area designation means (101 of fig. 1A) for designating an image area to be printed of an image represented by image data of one frame, (see frame of abstract and column 3 line 45-68) and partial image data extraction means (101 of fig. 1A) for extracting partial image area data representing the designated image area from the image data of one frame. (See thinning of abstract) Hunt and Tsutamori are combinable because they are from the same area of transferring images through a network.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the client computer of Hunt by adding an image data quantity reduction device, and transmitting the reduced image from the client to the server, as taught by Tsutamori. The suggestion of doing so can be reasoned by one of ordinary skill in the art because this would have allowed the client to perform some of the work of the server of Hunt and thereby, free up the server for serving more clients.

Moreover, it would have been obvious to one of ordinary skill in the art to modify the client computer of Hunt by adding a print image area designation means for designating an image area to be printed of an image represented by image data of one frame, and partial image data extraction means for extracting partial image area data representing the designated image area from the image data of one frame. The suggestion of doing so can be reasoned by one of ordinary skill in the art because this would have allowed the client computer to perform a thinning operation to prevent excess data to be transmitted, and thereby, saving precious network bandwidth. Therefore, it would have been obvious to combine Hunt and Tsutamori to obtain the invention as specified in claims 19, 27, 31.

Note: Hunt teaches to use a computer readable recording medium to store a program. (See 314 of fig. 3)

Regarding claim 20: Hunt and Tsutamori teaching a thinning device (see discussion of claim 19) Tsutamori further teaches to use the client workstation (means) to perform resolution

conversion on image data to be transmitted to an output device. The resolution of the image data is less than or equal to the output image data. (See abstract of Tsutamori)

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Hunt's image data quantity reduction device by adding a resolution conversion means for converting image data to be transmitted into image data having a resolution which is less than or equal to the resolution of the image output from the output device, as taught by Tsutamori. The suggestion of using the resolution conversion mean in Hunt's client computer can be reasoned by one of ordinary skill in the art because it would have allowed a user to customize (reduce) image data according to a resolution that he prefers.

Regarding claim 22: Hunt teaches to use a compression rate determine means (114 of 1B) for determining the compression rate of the image data to be transmitted to the image server on the basis of the speed of transmission of the image data between the image server and the client, (see fractal compression or progressive JPEG column 8 line 45-67, abstract, fig. 6, column 12 line 44-60)

8. Claims 4, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al. In view of Uda et al.

Regarding claims 4, 8: Hunt has disclosed all of the claim limitations except a printer for the server to print.

Uda teaches to provide a printer for a server to print image data for a host. (See fig. 1) Hunt and Uda are combinable because they are from the same area of using a server to store image data.

At the time of invention, it would have been obvious to one of ordinary skill in the art to provide a printer for the server for printing images. The suggestion of doing so would have allowed remote users to utilize a distant printer which is effective as discussed in column 1 line 58-60 of Uda. Therefore, it would have been obvious to combine Hunt and Uda to obtain the invention as specified in claim 4, 8.

Note: Since the image is used for display also, the RGB signal that the server produced for displaying needs to be converted to CMYK for the printer to print after the modification.

9. Claims 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uda et al. In view of Hunt et al.

Regarding claims 10, 12: Uda discloses an image server (see # 107 of fig.1), used in an image communication system in which the server having a printer (104s of fig. 1) and the client computer having a display, (see # 106 of fig. 1) are communicating with each other, comprising: an image reading device, (see # 103a of fig. 1) a first color conversion device (see 601 of fig. 6) for performing first color conversion processing on the read image in accordance with a characteristic of the printer, a print controller (402 of fig. 4) for controlling the printer so as to print an image from the first color converted image data, and an image data transmission device (see 202 of fig. 2) for transmitting the converted image data to the client computer.

Uda does not specifically teach a display in the client and a second color conversion device for performing second conversion processing on the read image data in accordance with a characteristic of the display device.

Hunt teaches to use a display in a client computer for display data transmitted from a server. (See fig. 1 and fig. 3 and column 9 line 1-5) Uda and Hunt are combinable because they are from the same area of transmitting data between clients and server.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Uda's client computer by using a display in the client to display information from the server as taught by Hunt. The suggestion of doing so can be reasoned by one of ordinary skill in the art because a display would have allowed a user to view images, and thereby, providing an efficient way of communicating information to a user.

Note: it is well known in the art that image data of a printer could convert into display data and vice versa.

10. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al. as applied to claim 13 above, and further in view of Kurahashi et al.

Regarding claim 15: Hunt teaches that the image server has an image data transmission device (108 of fig. 1A) for transmitting data to the image data receiver.

Hunt does not teach to transmit, if the image data receiver can change the characteristics of the image displayed, image data whose characteristics have not been adjusted.

Kurahashi teaches to transmit, if the image data receiver can change the characteristics of the image displayed, image data whose characteristics have not been adjusted form a server to an image data receiver. (See column 8 line 1-12) Hunt and Kurahashi are combinable because they are from the same area of editing images.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Hunt's image server by having the image data transmission device to transmit, if the image data receiver can change the characteristics of the image displayed, image data whose characteristics have not been adjusted from a server to an image data receiver, as taught by Kurahashi. The suggestion of doing so can be reasoned by one of ordinary skill in the art because by allowing the client (image data receiver) to edit images, work load of the server would have been decreased and thereby, free up the server to serve more clients. Therefore, it would have been obvious to combine Hunt and Kurahashi to obtain the invention as specified in claim 15.

Note: It would have been obvious that the image is to be edited in the server if the client cannot perform the editing function, given that the image is to be edited by either the client or the server.

11. Claims 34, 35, 36, 38-43, 45-48, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurahashi et al.

Regarding claim 34: Kurahashi teaches to use processors to carry out the invention disclosed in claims 26, 30 (See 312, 314 of fig. 3) It is well known in the art that the control of a

processor (CPU) is done by using a computer readable memory such as a ROM for storing the control code of the processor. A ROM is highly reliable and would have provided optimal performance for program execution for the program of the information processing apparatus. Therefore, it would have been obvious to use a well-known method of using a ROM (computer readable memory) for storing the control code for the processor of Kurahashi.

Regarding claims 35, 41: Kurahashi et al. teach an image editing system (see title, fig. 5) in which an image server (see # 52 of fig. 5) communicates with client computers (see # 53 and 55 of fig. 5) and the client computer edits images and sends the editing information (execution data indicating that an image is edited or reedited, if the information is that the image is to be edited by the server, the information is an indication that the image is to be edited in the server and not in the client) to the server, (Column 6 line 45-56), wherein execution data indicating that an image is edited for the first time (see leaf node of column 10 line 12-13) or reedited after the initial editing. (See column 10) The image server also sends editing image information to the client computer (see column 8 line 1-10), and the server further includes: a processing mean (see column 7 line 1-5) (judgment device and allowance data transmission mean) for judging whether the editing (both initial editing or re-editing) is allowed to be edited in the client computer or the server base on transmitted execution information and send editing information to the client computer that editing is allowed, and a receiving device (41 of fig. 4) for receiving editing information from the client computer. The client computer comprises a control

device/ image editing device (see # 32 of fig. 2) for performing editing (reediting) in response to the receiving of allowance data.

Note: Kurahashi teaches to send editing information back and forth and to have the image to be edited in any one of the computers, and the computer can edit the image data more than one time. (See column 9 line 5-20) Therefore, it would have been obvious that the computer used in the client or the server to reedit the image data (edit more than one time) is a reediting device, and the transmission device used to transmit the reediting information is a reediting transmission device.

Regarding claim 36, 43: As discussed in the discussion of claim 35, Kurahashi teaches to send editing (reediting) information about the editing image. It would have been obvious that the editing information is directed to the portion that the image is to be edited because the portion that is not to be edited would not need editing information.

Regarding claim 42: This is a method claim claiming the methods that the apparatus performs in claim 41. Please see claim 41.

Regarding claim 38, 45: Kurahashi teaches that a plurality of computers can be form by a group of two computers (see fig. 5) and because the computers are on a network, the network would have other groups of computers such as the group of computers shown in fig. 13.

Regarding claim 39, 46: Kurahashi teaches that the client computer comprises a keyboard (see fig. 5) (comment entry device) for entering editing information which can include comments like enlarge. (See enlarge comment of fig. 1) Those comment would be included in the editing

information and sent to other computer/server in case that the other computer/server is chosen to perform image editing.

Regarding claim 40, 47: Kurahashi teaches that the edited image (6 of fig. 1) is constituted by a plurality of object images. (See fig. 1) The editing functions include deletion, (see column 10 line 55), addition, (see composite of fig. 1) and alteration. (See enlarge of fig. 1)

Regarding claim 48: Kurahashi teaches to use a computer (see client computer and server of fig. 5) which has a program to control the editing system in claim 35. Please see claim 35.

Regarding claim 50: Kurahashi teaches that the image server includes an editing information transmission device (41 of fig.4) for transmitting editing information relating to the edited image which has been transmitted from one client computer. (See discussion on claim 35) The client includes an image reediting device for reediting the edited image, (see fig.1 and fig. 7) and a reediting information transmission device for transmitting reediting information relating to the reedited image to the server. (See column 9 line 25-50)

12. Claim 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uda et al. in view of Hunt et al. as applied to claim 10, and further in view of Hirono et al.

Regarding claim 49: Uda discloses all of the claim limitations except a display direction conversion processing device for displaying the image data in normal position.

Hirono teaches that inputting an image position into an image memory and to display the image in normal position. (See column 7 line 54-67 and column 8 line 1-7) Uda, Hunt and Hirono are combinable because they are from the same area of displaying an image.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the image server of Uda by adding a display direction conversion processing device to display the image in normal position. The suggestion of doing so would have allowed a user to scan in an image at any position and read out the image at a normal position as discussed in column 8 line 6-7 of Hirono which is desirable. Therefore, it would have been obvious to combine Uda, Hunt and Hirono to obtain the invention as specified in claim 49.

Note: the display direction converted data in the server is image data.

14. REMARKS

With respect to applicant's argument on page 22 and 23 that a modem is not a retrieving means, has been considered.

In reply, the examiner sees a modem as a communication device that has a function of retrieving data for two communication parties.

With respect to applicant's argument on page 23, 24 that Hunt does not teach to transmit display information, has been considered.

In reply, Hunt teaches to transmit information about the image quality that the display is displaying (see column 1 line 64-67, column 2 line 14-24) such that excess data need not be transmitted and processed by the server. The examiner sees that the image quality that the display displaying is information about the display.

With respect to applicant's argument on page 25 that Hunt does not teach to set a compression rate, calculate a transmission time, and display the calculated time, has been considered.

In reply, claims 23, 28, 32 is claiming displaying information relating to the transmission time and not the calculated time.

Hunt teaches a client computer (104 fig. 1) used in an image communication system (fig. 1) in which an image server and the client computer communicate with each other, comprising: a compression rate setting device (310 of fig. 3) for setting the compression rate of image data; (see fig. 6, abstract, column 12 line 50-67, column 8 line 52, and note) a calculation device (310 of fig. 3) for calculating information relating to the time required for transmission (abstract) in a case where the image data compressed at the set compression rate; (column 12 line 44-60, column 13 line 4-30) and a display for displaying (# 330 of fig. 3) information related to the calculated time for transmission. (See column 9 line 1-5, fig.6)

Note: A transmission time is calculated by dividing the actual data transmitted by the transmission speed.

Note: Hunt teaches to use a computer readable recording medium to store a program. (See 314 of fig. 3)

Note: Column 8 line 45-67 teaches to set image data to be transmitted by using different compression technique. It is obvious that by using different compression technique is equivalent

to the use of different compression rates because each compression technique would have a different compression rate.

With respect to applicant's argument on page 26 that Tasutamori does not teach that the CPU 101 does not function as a partial image data extraction means, and print area designation means, has been considered.

In reply, CPU 101 of fig. 1 clearly is an input controller for inputting image data to a file server. (Column 3 line 15-30) The examiner sees that the input controller is a client. The controller 101further has the function of thinning an image data (partial image data extraction) (column 3 line 45-55) and to fit picture elements into a frame. (Abstract)(print area designation mean)

With respect to applicant's argument on page 27 that Hunt does not teach color conversion processing based on characteristic of the display, has been considered.

In reply, Uda discloses a first color conversion device (see 601 of fig. 6) for performing first color conversion processing on the read image in accordance with a characteristic of the printer, a print controller (402 of fig. 4) for controlling the printer so as to print an image from the first color converted image data, and an image data transmission device (see 202 of fig. 2) for transmitting the converted image data to the client computer.

Uda does not specifically disclose that the color conversion is for a display.

Hunt teaches to use a display in a client computer for display data transmitted from a server. (See fig. 1 and fig. 3 and column 9 line 1-5) Uda and Hunt are combinable because they are from the same area of transmitting data between clients and server.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify Uda's client computer by using a display in the client to display information from the server as taught by Hunt. The suggestion of doing so can be reasoned by one of ordinary skill in the art because a display would have allowed a user to view images, and thereby, providing an efficient way of communicating information to a user.

Note: it is well known in the art that image data of a printer could convert into display data and vice versa. In other words, the teaching of the color conversion based on the printer characteristic is equivalent of the teaching of color conversion based on the printer characteristic.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892 or to Supervisor Mr. David Moore whose phone number is (703) 308-7452.

David K Moore

January 2, 2001

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